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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/871,075      | 05/31/2001  | Michael Thorburn     | PA-Y1031            | 9292             |

7590

05/21/2004

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EXAMINER

PEACHES, RANDY

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

2686

DATE MAILED: 05/21/2004

*[Handwritten signature]*

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/871,075

Applicant(s)

THORBURN ET AL.

Examiner

Randy Peaches

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE \_\_\_\_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☒ Claim(s) 3-10 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. ***Claim 1*** is rejected under 35 U.S.C. 102(e) as being as being anticipated by Miller et al (U.S. Publication Number 2001/0021195 A1).

Regarding ***claim 1***, Miller et al discloses a communication system (100) comprising:

- one or more gateways (122, 124) coupled to a terrestrial network.
- one or more user terminals or mobile terminals (126, 128), which reads on claimed "subscriber terminals", that is to be coupled to a terrestrial network via a gateway (122, 124) connection or link; and
- a communication satellite (118, 120) providing forward and return communications links between the one or more gateways (122, 124) and the one or more said user terminals, as described in paragraph [0055], comprise a Mobile Telephone Switching Office (MTSO)(112), which reads on claimed "a switching network", that selectively couples signals between selected gateways (122, 124) and selected said user terminals using predetermined satellite communication links (146, 142, 150), which reads on claimed "beams". See paragraphs [0048],[0049].

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. ***Claim 2*** is rejected under 35 U.S.C. 103(a) as being unpatentable over Miller et al (U.S. Publication Number 2001/0021195 A1) in view of Chang et al (U.S. Publication Number 2002/0128045 A1).

Regarding ***claim 2***, according to ***claim 1***, Miller et al fails to disclose wherein the terrestrial network comprises the Internet.

Chang et al (U.S. Publication Number 2002/0128045 A1) teaches in paragraph [0043] and claim number 10, that the gateway is coupled to a terrestrial network comprised of the Internet.

Therefore, at the time of the invention it would have been obvious to a person of ordinary skill in the art to modify Miller et al (U.S. Publication Number 2001/0021195 A1) to include Chang et al (U.S. Publication Number 2002/0128045 A1) in order have terrestrial network comprised of the internet to allow said user terminals accessibility to the internet for retrieval of global information.

***Allowable Subject Matter***

3. ***Claims 3-10*** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding ***claim 3***, the applied reference fail to disclose or render the obvious, wherein the forward communication link implemented in the communication satellite comprises:

- a plurality of first switches that receive data transmitted from a respective plurality of gateways; one or more forward channel gateway multi-plexers selectively coupled to one of the plurality of first switches;
- a plurality of second switches selectively coupled to outputs of the plurality of first switches and selectively coupled to outputs of the one or more forward channel gateway multi-plexers; and
- one or more regional multi-plexers selectively coupled to the plurality of second switches that output data to a plurality of regions servicing the one or more subscriber terminals.

Regarding ***claim 4***, the applied reference fail to disclose or render the obvious, wherein the selected ones of the pluralities of the first and second switches comprise power dividing hybrids.

Regarding **claim 5**, the applied reference fail to disclose or render the obvious, wherein the forward communication link implemented in the communication satellite comprises:

- a first switch for receiving data transmitted from a first gateway; a third switch for receiving data transmitted from a second gateway;
- a forward channel gateway multi-plexer coupled to the first switch;
- a second switch coupled to the first switch and to a first output of the forward channel gateway multi-plexer;
- a fourth switch coupled to the third switch and to a second output of the forward channel gateway multi-plexer;
- a first multi-plexer coupled to the second switch that outputs data to a first plurality of regions; and
- a second multi-plexer coupled to the fourth switch that outputs data to a second plurality of regions.

Regarding **claim 6**, the applied reference fail to disclose or render the obvious, wherein the return communication link implemented in the communication satellite comprises:

- one or more regional multi-plexers that receive data transmitted from subscriber terminals located in a plurality of regions;

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- a plurality of third switches respectively coupled to the one or more regional multi-plexers;
- one or more return channel gateway multi-plexers selectively coupled to the plurality of third switches; and
- a plurality of fourth switches selectively coupled to the one or more return channel gateway multi-plexers and plurality of third switches that output data to the one or more gateways

Regarding **claim 7**, the applied reference fails to disclose or render the obvious, wherein the selected ones of the pluralities of the third and fourth switches that output data to the one or more gateways.

Regarding **claim 8**, the applied reference fail to disclose or render the obvious, wherein the return communication link implemented in the communication satellite comprises:

- a first multi-plexer for receiving data transmitted from a first plurality of regions;
- a second multi-plexer for receiving data transmitted from a second plurality of regions;
- a first switch coupled to the first multi-plexer;
- a second switch coupled to the second multi-plexer;
- a return channel gateway multi-plexer selectively coupled to the first and second switches;

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- a third switch selectively coupled to the first switch and the return channel gateway multi-plexer that outputs data to a first gateway; and
- a fourth switch coupled to the third switch that outputs data to a second gateway.

Regarding **claim 9**, the applied reference fail to disclose or render the obvious, wherein each communication link implemented in the communication satellite comprises:

- one or more first switches that communicate with corresponding gateways;
- one or more gateway multi-plexers coupled to the one or more first switches; one or more second switches selectively coupled to the one or more gateway multi-plexers and selectively coupled to the one or more first switches; and
- one or more regional multi-plexers coupled to the one or more second switches that communicate with plurality of regions.

### ***Response to Arguments***

Applicant's arguments filed February 23, 2004 have been fully considered but are not persuasive.

Regarding **claim 1**, the Applicant respectfully submits that no where in the applied cited prior art, Miller et al publication, states communication links between one or more gateways and the one or more user terminals, is there disclosed forward and return communication links between the one or more gateways and the one or more

subscriber terminals that each comprise a switching network that selectively couples signals between selected gateways and the selected subscriber terminals using predetermined beams.

**The Examiner respectfully concludes that the Applicant's arguments are not persuasive and therefore, the rejection of the claim presently under prosecution stands firm. Examiner brings to the Applicant's attention, the predetermined beams, which are referenced in Miller et al as communication links (146, 142, 150), according to FIGURE 1 paragraph [0052], are presented to provide a bridge between one or more gateways (122, 124) and one or more user terminals or mobile terminals (126, 128).**

**The Examiner respectfully concludes that per Miller et al's said communication links (146, 142, 150), in fact do disclose a switch network, MTSO (112), as taught in FIGURE 1, paragraph [0048, 0049, 0051], that couples the said communication links between said gateways (122, 124) and said user terminals or mobile terminals (126, 128).**

**Therefore per the above Examiner's responses, the rejection to Applicant's claim presently under prosecution stands firm, based on the given facts that Miller et al disclose and continues to disclose communication links (146, 142, 150), in a network, comprising a switch network, MTSO (112), applicable to couple signals between the selected gateways (122, 124) and selected user terminals or mobile terminals (126, 128).**

Regarding **claim 2**, according to **claim 1**, the Applicant respectfully contests that the communication system described in the drawing (FIGURE 1), the specification, and the claims are not analogous to the communication system described in Miller et al and therefore not properly combinable.

**The Examiner respectfully concludes that the rejection under 35 U.S.C. 103(a), stands firm based on the facts that since Miller fails to expressly disclose the said terminals or mobile terminals (126, 128) coupled to a terrestrial network comprising the Internet via the said gateways (122, 124). Chang et al, represented as the secondary reference to Miller et al, disclosed and continues to disclose, in FIGURE 1 and paragraph [0039, 0043], a system where the user terminals are coupled to the said terrestrial network (22), represented as the Internet, via a gateway (20).**

**Therefore the at the time of the invention it would have been obvious to a person of ordinary skilled in the art to modify Miller et al (U.S. Publication Number 2001/0021195 A1) to include Chang et al (U.S. Publication Number 2002/0128045 A1) in order provide a system capable of coupling the said user terminals to a terrestrial network (22), comprising the Internet, to allow the user access to information to the World Wide Web. The Examiner respectfully concludes that the cited secondary prior art Chang et al is analogous to the primary prior art Miller et al and therefore is combinable.**

### **Conclusion**

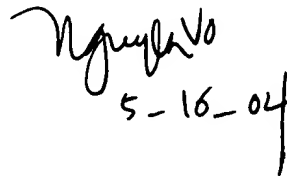
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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Randy Peaches whose telephone number is (703) 305-8993. The examiner can normally be reached on Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha D. Banks-Harold can be reached on (703) 305-4379. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Randy Peaches  
May 7, 2004



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PRIMARY EXAMINER